

COST ESTIMATE FOR POTENTIAL REMEDIATION ALTERNATIVES FOR THE MOSES LAKE MAINTAINANCE FACILITY

Estimate for Remediation of Approximately 9500 tons of Impacted Soil																	
		Trucks per day (18 yards / truck)	Rate Yards/Day	Rate tons/day (1.7 tons / yard)	Days (10 to 12 hrs)	Disposal / Treatment (\$/tons)	Transportation (\$/tons)	Excavation (\$/tons)	\$/ton	\$ for 9500 tons*	Backfill (\$/ton)	\$ Backfill total	On Site Treatment Setup	Wash racks and drainage replacement	Total \$ for Soil Remediation Activities	Semi Annual Monitoring for 20 Years	Install Asphalt Cap and Monitoring Well
Alternative																	
3	Capping, Monitoring and Institutional Controls	0	0	0	6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$272,000	\$80,000
4	Excavate and Landfill Off-Site	20	360	612	15.5	\$16	\$18	\$5	\$39	\$370,500	\$3	\$28,500	\$0	\$12,000	\$399,000	\$89,000	
5	Excavate and Treat On-Site Staged, 180 tons / 14 hr day	6.5	117	199	47.8	\$32	\$0	\$10	\$42	\$399,000	\$4	\$38,000	\$6,000	\$12,000	\$443,000	\$89,000	
6	Excavate and Treat Off-Site	20	360	612	15.5	\$32	\$25	\$5	\$62	\$589,000	\$3	\$28,500	\$0	\$12,000	\$617,500	\$89,000	
Estimate for Remediation of Approximately 9500 Tons of Impacted Soil cont.																	
		Golder w Lab per day	\$ for Golder + days	Analytical (confirmatory) \$150	Geotech Sub \$250/day	Total \$ for Oversight testing and analytical Services	PERMITTING				Remediation Report	CAP, Negotiations, Public Meetings and Responsiveness Summary	Design Report / Bidders Package	Permits and Documents Total	Cleanup Totals without permits and reporting	TOTALS	TOTAL with 20% contingency
							SEPA / Grading	Stormwater	Air Permit (Treatment On Site Alt.)	Noise Issues (Treatment On Site Alt.)							
Alternative																	
3	Capping, Monitoring and Institutional Controls	\$900	\$5,400	\$1,200	\$3,250	\$10,750	\$10,000	\$10,000	-	-	\$20,000	\$20,000	\$20,000	\$80,000	\$362,750	\$442,750	\$531,300
4	Excavate and Landfill Off-Site	\$1,300	\$20,180	\$5,100	\$3,881	\$30,460	\$10,000	\$20,000	-	-	\$25,000	\$20,000	\$25,000	\$100,000	\$518,460	\$618,460	\$742,153
5	Excavate and Treat On-Site Staged, 180 tons / 14 hr day	\$1,300	\$62,092	\$5,100	\$11,941	\$80,432	\$10,000	\$20,000	\$15,000	\$8,000	\$30,000	\$25,000	\$35,000	\$143,000	\$612,432	\$755,432	\$906,519
6	Excavate and Treat Off-Site	\$1,300	\$20,180	\$5,100	\$3,881	\$30,460	\$10,000	\$20,000	-	-	\$25,000	\$20,000	\$25,000	\$100,000	\$736,960	\$836,960	\$1,004,353
Note: Costs Estimated based excavation of 5,600 total yards (9,500 tons) of soil. Estimation of total yards of soil is based on the excavation area identified on Figure 9-2 times an estimated average depth of 5 ft.																	